

Title (en)
TOUCH SENSING DEVICE WITH GROUPED ELECTRODES FOR DETERMINATION OF TARGET OBJECTS WITH A PREDETERMINED SIZE

Title (de)
BERÜHRUNGSEMPFINDLICHE VORRICHTUNG MIT SUBGRUPPEN VON ELEKTRODEN ZUR DETEKTION VON OBJEKTEN
VORBESTIMMTER GRÖSSE

Title (fr)
DISPOSITIF DE DÉTECTION TACTILE AVEC DES GROUPS D'ELECTRODE POUR DETERMINER D'UN OBJET AVEC UNE TAILLE FIXÉE

Publication
EP 3001292 A1 20160330 (EN)

Application
EP 15020164 A 20150917

Priority
JP 2014195074 A 20140925

Abstract (en)
The invention provides a touch sensing device having a simplified controller, with reduced possibility of falsely detecting a conductor other than the detection target if the touch sensing device has an enlarged detection area. A touch sensing device T detects approach of a detection target to a detection area 510a of a sensing face 501. The touch sensing device T includes a base 100, a plurality of detection electrodes 200a, and a controller 400. The base includes a counterpart area 110a at a position of the base 100 corresponding to the detection area 510a, the counterpart area being located on a deeper side in the touch sensing device T relative to the detection area 510a. The detection electrodes 200a are arranged at intervals in the counterpart area 110a. An output signal from each detection electrode 200a changes in response to an approach of the detection to the detection electrode 200a. The controller 400 is connected to the detection electrodes 200a and detects that the detection target approaches the detection area 510a corresponding to the counterpart area 110a when an output signal or signals from a predetermined number of detection electrodes 200a of all the detection electrodes 200a in the counterpart area 110a has changed.

IPC 8 full level
G06F 3/041 (2006.01); **G06F 3/044** (2006.01)

CPC (source: EP US)
G06F 3/0416 (2013.01 - EP US); **G06F 3/0443** (2019.04 - EP US); **G06F 2203/04101** (2013.01 - US)

Citation (applicant)
JP 2014071863 A 20140421 - FUJIKURA LTD

Citation (search report)
• [XY] US 2010134422 A1 20100603 - BORRAS RODRIGO L [US]
• [Y] US 2011279408 A1 20111117 - URANO SEIJI [JP], et al
• [A] US 2014267139 A1 20140918 - SLABY JIRI [US], et al
• [A] US 2012120006 A1 20120517 - LIU YONG [SG]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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TW 201612709 A 20160401; US 2016092002 A1 20160331

DOCDB simple family (application)
EP 15020164 A 20150917; CN 201510617063 A 20150924; JP 2014195074 A 20140925; KR 20150100602 A 20150715;
TW 104123551 A 20150721; US 201514861066 A 20150922